



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

22801 7590 02/07/2011

LEE & HAYES, PLLC
601 W. RIVERSIDE AVENUE
SUITE 1400
SPOKANE, WA 99201

EXAMINER

ITUKRALDE, ENRIQUE W

ART UNIT

PAPER NUMBER

2179

DATE MAILED: 02/07/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,734	02/19/2004	Shafiq Ur Rahman	MS1-1848US	3409
TITLE OF INVENTION: MEDIA TIMELINE				

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	05/09/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

22801 7590 02/07/2011
LEE & HAYES, PLLC
601 W. RIVERSIDE AVENUE
SUITE 1400
SPOKANE, WA 99201

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,734	02/19/2004	Shafiq Ur Rahman	MSI-1848US	3409
TITLE OF INVENTION: MEDIA TIMELINE				

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	05/09/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
ITURRALDE, ENRIQUE W	2179	715-716000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,734	02/19/2004	Shafiq Ur Rahman	MSI-1848US	3409
22801	7590	02/07/2011	EXAMINER	
LEE & HAYES, PLLC 601 W. RIVERSIDE AVENUE SUITE 1400 SPOKANE, WA 99201				
			TUTURALDE, ENRIQUE W	
			ART UNIT	PAPER NUMBER
			2179	
DATE MAILED: 02/07/2011				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 714 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 714 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/782,734

Examiner

ENRIQUE W. ITURRALDE

Applicant(s)

RAHMAN ET AL.

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 11/05/2010.
2. ☒ The allowed claim(s) is/are 1,2,4,5,7-9,11-18,20-26,28,30-35,37-41,44,45,47-52,54-62,64-68,70-72,74-79,82-84,86,87 and 89-96.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bea Koempel-Thomas on 1/24/2011.

Claim Amendments

1. (Currently Amended) A method comprising:

receiving a request, from an application at an application programming interface (API), to interact with a plurality of media comprising streaming media; and
generating an original media timeline based on the request, wherein the original media timeline:

is exposed to the application via the API;

includes a plurality of nodes;

defines a presentation, to be output via one or more computers, of a first media referenced by a first node with respect to a second media referenced by a second node, wherein:

the first and second nodes are configured as parallel nodes such
that the media referenced by the first node that is a child of a parent node
is rendered concurrently with the media referenced by the second node
that is a child of the same parent node;

the original media timeline is configured for dynamic creation,
automatically by the one or more computers without human user
interaction, such that at least one node is dynamically created while at
least one of the media referenced by the plurality of nodes of the original
media timeline is being rendered; and

at least one node includes metadata, the metadata describing:
rendering of the at least one node; and

a collection of additional nodes to be dynamically modified
when the original media timeline is rendered; and

specifies, automatically by the one or more computers without human user
interaction, delayed creation of one or more of the plurality of nodes when the
media timeline is rendered, wherein the delayed creation includes creating the
one or more of the plurality of nodes when called by the application.

2. (Previously Presented) A method as described in claim 1, wherein one or
more nodes are configured as a sequence node such that one node that is a child of the
sequence node is rendered after another node that is also a child of the sequence node.

3. (Canceled)

4. (Previously Presented) A method as described in claim 1, wherein one or more nodes is configured as a root node that specifies a starting point for rendering the original media timeline.

5. (Previously Presented) A method as described in claim 1, wherein the first and second said nodes reference the respective first and second media utilizing respective first and second pointers.

6. (Canceled)

7. (Currently Amended) A method as described in claim 1, wherein the metadata is selected from a group of metadata, the group of metadata consisting of:
a uniform resource locator (URL) URL property for the media referenced by the at least one node;

a source object property that specifies a source object which can resolve to a media source that provides the media referenced by the at least one node;

a source object identifier (ID) [[ID]] property that specifies a unique identifier of the source object;

a media start property that specifies a time, during a duration of the media referenced by the at least one node, that rendering of the media is to be started;

a media stop property that specifies a time, during a duration of the media referenced by the at least one node, that rendering of the media is to be stopped;

a time format property that specifies a time format for at least one of the media start property, and the media stop property;

a stream selection property which specifies one of a plurality of streams for rendering of the media referenced by the at least one node;

a format based property that specifies a format for the media referenced by the at least one node;

a loop count property that specifies a number of times the at least one node is to be rendered;

a disabled property that specifies whether the at least one node is to be rendered when the original media timeline is rendered;

a generic property that serves as a repository of information related to the at least one node, wherein the generic property is configured for specification by at least one of the application and a timeline source for rendering the original media timeline;

a noskip property that specifies that the rendering of the at least one node is not to be skipped when the original media timeline is rendered; and

a noskip child property that specifies that the at least one node has another node, which is a child of the at least one node, which specifies that the rendering of the other node is not to be skipped when the original media timeline is rendered.

8. (Previously Presented) A method as described in claim 1, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node.

9. (Previously Presented) A method as described in claim 1, wherein the original media timeline is configured for dynamic loading such that metadata included in at least one node specifies a collection of nodes to be loaded when the original media timeline is rendered.

10. (Canceled)

11. (Previously Presented) A method as described in claim 1, wherein at least one node of the original media timeline is specified as read-only by creating a read-only wrapper of the original media timeline.

12. (Previously Presented) A method as described in claim 1, wherein at least one node is configured for communication of events to another node such that a change may be made to the original media timeline while the original media timeline is rendered.

13. (Previously Presented) A method as described in claim 1, wherein the first and second media have different formats.

14. (Currently Amended) One or more computer ~~readable media~~ storage devices storing computer executable instructions that, when executed by a computer, direct the computer to perform the method of claim 1.

15. (Currently Amended) A method comprising:

generating a media timeline by an application, wherein the media timeline:

includes a plurality of nodes referencing media comprising streaming media;

defines a presentation of a first media referenced by a first node with respect to a second media referenced by a second node, the presentation being configured to be output by one or more computers;

specifies, automatically by the application executing on the one or more computers without human user interaction, that one or more of the plurality of nodes is created in a delayed manner in response to being called by one or more applications while the media timeline is being rendered; and

is configured, automatically by the application executing on the one or more computers without human user interaction, for dynamic creation such that at least a first node grouping is created while media referenced by a second node grouping in the media timeline is being rendered; and passing the media timeline to a timeline source for rendering.

16. (Previously Presented) A method as described in claim 15, wherein the first and second media have different formats.

17. (Previously Presented) A method as described in claim 15, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node.

18. (Previously Presented) A method as described in claim 15, wherein the media timeline is configured for dynamic loading such that metadata included in at least one node specifies a collection of nodes to be loaded when the media timeline is rendered.

19. (Canceled)

20. (Currently Amended) One or more computer ~~readable media~~ storage devices storing computer executable instructions that, when executed by a computer, direct the computer to perform the method of claim 15.

21. (Currently Amended) A method for outputting a media presentation via one or more computers comprising:
specifying an effect to be applied to one or more of a plurality of media comprising streaming media when the media is rendered; and

generating a media timeline configured for exposure via an application programming interface (API), wherein:

the media timeline includes a plurality of nodes;

two or more of the plurality of nodes reference respective media;

one or more of the plurality of nodes that reference the one or more of the plurality of media include metadata that controls the effect to be applied to the one or more of the plurality of media when the media is rendered;

the media timeline specifies automatically by the one or more computers without human user interaction, delaying creation of one or more of the plurality of nodes when the media timeline is rendered, wherein delaying the creation includes at least one of the one or more computers automatically creating the one or more of the plurality of nodes when called by one or more applications;

the media timeline [[is]] being configured for dynamic creation, automatically by the one or more computers without human user interaction, such that at least one node of the plurality of nodes is created while the media timeline is rendered; and

at least one node of the plurality of nodes includes metadata, the metadata describing:

rendering of the at least one node of the plurality of nodes; and

a collection of additional nodes of the plurality of nodes to be dynamically modified when the at least one node of the plurality of nodes is rendered.

22. (Original) A method as described in claim 21, wherein the effect is a simple effect provided by a software component that is configured to:

- receive a single stream of media;
- apply the effect to the single stream; and
- output the applied single stream.

23. (Original) A method as described in claim 21, wherein the effect is a composite effect provided by a software component that is configured to:

- receive at least two streams of media;
- apply the effect to the at least two streams; and
- output a single stream of media composed of the applied at least two streams.

24. (Previously Presented) A method as described in claim 21, wherein the effect is a composite effect provided by a software component that is configured to analyze at least two streams of media or output at least two streams of media.

25. (Previously Presented) A method as described in claim 21, wherein the effect is a transition effect to be applied as a transition from a first media referenced by a first node to a second media referenced by a second node.

26. (Currently Amended) A method as described in claim 21, wherein the effect includes metadata that describes the effect that is selected from the group of metadata, the group of metadata comprising:

- an effect object globally unique identifier (GUID) ~~GUID~~ property that specifies a GUID to be used to create a transform object that is configured to provide the effect;

- an effect object property that references an effect object that is configured to provide the effect;

- a priority property that specifies an ordering of a plurality of effects, one to another;

- a media start property that specifies a time, during a duration of the media referenced by the node, that rendering of the media is to be started;

- a media stop property that specifies a time, during a duration of the media referenced by the node, that rendering of the media is to be stopped;

- a time format property that specifies a time format for at least one of the media start property and the media stop property;

- a number of inputs property that specifies a number of inputs to the effect;

- a number of outputs property that specifies a number of outputs from the effect;

- an output major type property that specifies a major type for media, to which, the effect is to be applied; and

- an input connections property that specifies the one or more nodes that are to be processed by the effect.

27. (Canceled)

28. (Previously Presented) A method as described in claim 21, wherein the media timeline is configured for dynamic loading such that metadata included in at least one node specifies a collection of nodes to be loaded when the media timeline is rendered.

29. (Canceled)

30. (Previously Presented) A method as described in claim 21, wherein at least one node is specified as read-only.

31. (Previously Presented) A method as described in claim 21, wherein at least one node is configured for communication of events to another node such that a change may be made to the media timeline while the media timeline is rendered.

32. (Currently Amended) One or more computer ~~readable-media~~ storage devices storing computer executable instructions that, when executed by a computer, cause the computer to perform the method of claim 21.

33. (Currently Amended) In a media timeline exposed via an application programming interface and having a plurality of nodes, a method comprising:

rendering a first media item of a plurality of media items, at least one of the plurality of media items comprising a streaming media item, the first media item being referenced by a first node of a first node type of a plurality of node types, the plurality of node types comprising a sequence node type that includes metadata describing a rendering order of a plurality of leaf nodes to the sequence node;

receiving a call for a second node that references a second media item;

dynamically creating automatically, without user intervention, the second node of a second node type of the plurality of node types, while rendering the first media item;

wherein the media timeline is configured for automatic dynamic updating, automatically by the one or more computers without human user interaction, such that metadata included in at least one node specifies a collection of nodes to be modified when the at least one node is loaded; and

delaying, automatically by the one or more computers without human user interaction, creation of one or more of the collection of nodes when the media timeline is rendered, wherein the delayed creation includes a computer automatically creating the one or more of the collection of nodes when called by one or more applications.

34. (Previously Presented) A method as described in claim 33, further comprising rendering the second media item referenced by the second node when the rendering of the first media item is completed.

35. (Previously Presented) A method as described in claim 33, further comprising:

rendering the second media item referenced by the second node;
receiving a call for a third node that references a third media item; and
creating the third node.

36. (Canceled)

37. (Previously Presented) A method as described in claim 33, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node.

38. (Previously Presented) A method as described in claim 33, wherein at least one node is specified as read-only.

39. (Previously Presented) A method as described in claim 33, wherein at least one node is configured for communication of events to another node such that a change may be made to the media timeline while the media timeline is rendered.

40. (Currently Amended) One or more computer ~~readable media~~ storage devices storing computer executable instructions that, when executed by a computer, direct the computer to perform the method of claim 33.

41. (Currently Amended) In a media timeline exposed via an application programming interface, the media timeline having a plurality of nodes, at least two of which reference respective media, one or more nodes each having metadata that references a node grouping, a method comprising:

utilizing a computer to load a first node for rendering, wherein the first node is selected from a plurality of node types, the plurality of node types comprising a parallel node type that includes metadata specifying a plurality of leaf nodes that are rendered simultaneously;

examining metadata associated with the first node to determine a first node grouping to be loaded in conjunction with the first node;

loading each node referenced by the first node grouping;

rendering the first node grouping;

examining at least one second node in the first node grouping to determine a second node grouping, wherein the examining the at least one second node in the first node grouping is performed during the rendering of the first node grouping;

loading each node referenced by the second node grouping; and

rendering the second node grouping when the rendering of the first node grouping is completed, wherein:

the media timeline is configured for dynamic creation, automatically by the one or more computers without human user interaction, where at least a third node is specified automatically by the computer without human user interaction

for delayed creation ~~created~~ while the media timeline is being rendered, the dynamic creation of the third node being performed by a node source that includes data that defines properties and interrelationships of the created third node with respect to one or more nodes in the first node grouping or one or more nodes in the second node grouping; and

at least a fourth node is configured for communication of an initiated event to another a fifth node which has subscribed to receive events initiated by the fourth node, such that a change may be is made to one or more nodes in the media timeline that are affected by the initiated event while the media timeline is being rendered, wherein the plurality of one or more nodes of the media timeline that are affected by the initiated event change are automatically dynamically updated.

42 and 43. (Canceled)

44. (Previously Presented) A method as described in claim 41, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node, wherein the media comprises streaming media.

45. (Previously Presented) A method as described in claim 41, wherein at least one node is specified as read-only.

46. (Canceled)

47. (Previously Presented) A method as described in claim 41, wherein a first node references media having a plurality of different formats that are a different format than media referenced by one or more nodes of the second node grouping.

48. (Currently Amended) One or more computer ~~readable media~~ storage devices storing computer executable instructions that, when executed by a computer, direct the computer to perform the method of claim 41.

49. (Currently Amended) A method comprising:

- exposing a media timeline via an application programming interface (API), the media timeline having a plurality of nodes, two or more nodes each referencing respective media at least one of which comprises streaming media, and wherein the media timeline is configured for dynamic loading creation, automatically by the one or more computers without human user interaction, such that metadata included in at least one node specifies a collection of nodes to be loaded when the media timeline is rendered;
- rendering a first node to output a referenced first said media;
- during the rendering of the first node, the API dynamically changing one or more properties of a second node;

initiating, by an event generator located on the second node, an event for communication to a parent node of the second node, wherein the event describes the changing; and

delaying, automatically by the one or more computers without human user interaction, creation of one or more of the plurality of nodes when the media timeline is exposed, wherein the delayed creation includes creating the one or more of the plurality of nodes when called by one or more applications.

50. (Original) A method as described in claim 49, wherein the event is communicated to at least one of an application over the API and a timeline source for rendering the media timeline.

51. (Previously Presented) A method as described in claim 49, wherein the one or more properties are selected from the group consisting of:

- node added event;
- node removed event;
- node changing event;
- remove children event;
- node source added event;
- node source removed event;
- node sort event; and
- node moved event.

52. (Previously Presented) A method as described in claim 49, wherein:
at least one node of the media timeline is configured as a root node; and
each event generated by one of the plurality of nodes that is a child of the root node is communicated to the root node.

53. (Canceled)

54. (Previously Presented) A method as described in claim 49, wherein the media timeline is configured for dynamic creation such that at least one node is created while the media timeline is rendered.

55. (Previously Presented) A method as described in claim 49, wherein at least one node is specified as read-only.

56. (Previously Presented) A method as described in claim 49, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node.

57. (Currently Amended) One or more computer ~~readable media~~ storage devices storing computer executable instructions that, when executed by a computer, direct the computer to perform the method of claim 49.

58. (Currently Amended) An application programming interface ~~embedded~~ stored on a computer storage ~~medium device~~, which when interfaced with a computer, exposes a media timeline to one or more independent applications, the application programming interface comprising:

the media timeline, automatically by the computer without human user interaction, delaying creation of one or more of a plurality of nodes when the media timeline is rendered, wherein the delayed creation includes the computer creating the one or more of the plurality of nodes when called by one or more applications;

the media timeline comprising the plurality of nodes callable by the one or more applications, wherein:

each node includes metadata that describes the node, the metadata comprising a source object property that specifies a source object which can resolve to a media source that provides the media referenced by the node;

the one or more of the plurality of nodes reference a corresponding media item comprising a streaming media item;

the plurality of nodes are arranged in a tree structure; and

the arrangement of the plurality of nodes, one to another, describes an order for rendering the plurality of nodes, wherein the media timeline is configured for dynamic creation, automatically by the computer without human user interaction, such that at least one node is created while the media timeline is

rendered and at least one node is dynamically updated in response to the at least one node being created.

59. (Currently Amended) An application programming interface as described in claim 58, wherein the metadata for each node is selected from a group of metadata, the group of metadata comprising:

- a uniform resource locator (URL) ~~URL~~ property for the media referenced by the node;

- a source object identifier (ID) ~~[[ID]]~~ property that specifies a unique identifier of the source object;

- a media start property that specifies a time, during a duration of the media referenced by the node, that rendering of the media is to be started;

- a media stop property that specifies a time, during a duration of the media referenced by the node, that rendering of the media is to be stopped;

- a time format property that specifies a time format for at least one of the media start property, and the media stop property;

- a stream selection property which specifies one of a plurality of streams for rendering of the media referenced by the node;

- a format based property that specifies a format for the media referenced by the node;

- a loop count property that specifies a number of times the node is to be rendered;

a disabled property that specifies whether the node is to be rendered when the media timeline is rendered;

a noskip property that specifies that the rendering of the node is not to be skipped when the media timeline is rendered; and

a noskip child property that specifies that the node has another node, which is a child of the node, which specifies that the rendering of the other node is not to be skipped when the media timeline is rendered.

60. (Previously Presented) An application programming interface as described in claim 58, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node.

61. (Previously Presented) An application programming interface as described in claim 58, wherein at least one node includes metadata that describes rendering of the at least one node.

62. (Previously Presented) An application programming interface as described in claim 58, wherein the media timeline is configured for dynamic loading such that metadata included in at least one node specifies a collection of nodes to be loaded when the media timeline is rendered.

63. (Canceled)

64. (Previously Presented) An application programming interface as described in claim 58, wherein at least one node is specified as read-only.

65. (Previously Presented) An application programming interface as described in claim 58, wherein at least one node is configured for communication of events to another node such that a change may be made to the media timeline while the media timeline is rendered.

66. (Currently Amended) An application programming interface stored on a computer storage ~~device medium~~, that when accessed by a computer facilitates acts comprising:

~~exposing, automatically by the computer without human user interaction,~~ a media timeline to one or more independent applications, the media timeline comprising a plurality of nodes callable by one application, wherein:

two or more of the nodes reference respective media, one of which comprises streaming media;

at least one of the nodes specifies, automatically by the computer without human user interaction, delayed creation of one of the plurality of nodes as a delayed node when the media timeline is rendered, wherein the delayed creation includes creating the delayed node when called by one or more applications;

the plurality of nodes are arranged in a hierarchy to include a parent node and a child node; and

the child node is configured for initiating an event for communication to the parent node, wherein the event:

is configured such that a change may be made to one or more properties of the child node while the media timeline is rendered; and

describes the change such that additional nodes associated with the child node are dynamically ~~updated~~ created, automatically by the computer without human user interaction, in accordance with the communicated event.

67. (Previously Presented) An application programming interface as described in claim 66, wherein another node, which is not a parent of the child node, subscribes to the child node to receive the event.

68. (Previously Presented) An application programming interface as described in claim 66, wherein another node subscribes to the child node to receive:

the event initiated by the child node; and

one or more events initiated by children of the child node.

69. (Canceled)

70. (Original) An application programming interface as described in claim 66, wherein the event describes a change made to the media timeline, the event selected from the group consisting of:

- node added event;
- node removed event;
- node changing event;
- node changed event;
- remove children event;
- node source added event;
- node source removed event;
- node sort event; and
- node moved event.

71. (Previously Presented) An application programming interface as described in claim 66, wherein:

- one node of the media timeline is configured as a root node; and
- each event generated by one of the plurality of nodes that is a child of the root node is communicated to the root node.

72. (Previously Presented) An application programming interface as described in claim 66, wherein the media timeline is configured for dynamic loading such that

metadata included in at least one node specifies a collection of nodes to be loaded when the media timeline is rendered.

73. (Canceled)

74. (Previously Presented) An application programming interface as described in claim 66, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node.

75. (Previously Presented) An application programming interface as described in claim 66, wherein at least one node is specified as read-only.

76. (Currently Amended) An application programming interface ~~embodied in an infrastructure layer~~ stored on a memory of a computer that, when interacted with by an application facilitates actions comprising:

exposing a media timeline comprising two or more nodes to the application; and
enabling the application to call any of the two or more nodes, wherein each of the two or more nodes:

references corresponding media, at least one of the corresponding media comprising streaming media while another of the corresponding media does not include streaming media;

includes metadata describing one or more properties for rendering the corresponding media; and

includes metadata specifying the node as read-only; and
configuring, automatically by the computer without ~~user~~ human user interaction, the media timeline for dynamic creation such that at least one of the two or more nodes is created while the media timeline is being rendered; and

specifying, automatically by the computer without ~~user~~ human user interaction, delayed creation of one of the two or more nodes as a delayed node when the media timeline is rendered, wherein the delayed creation includes creating the delayed node when called by one or more applications.

77. (Currently Amended) A system comprising:

a plurality of media comprising streaming media;
a plurality of applications; and
an infrastructure layer that:

provides an application programming interface (API) for interaction by the plurality of applications with the plurality of media when any application is executed; and

exposes a media timeline, callable by the plurality of applications via the API upon an execution thereof, and that defines a presentation of the plurality of media, wherein the media timeline:

includes a plurality of nodes that each reference respective media;

is configured to specify, automatically by a computer without human user interaction, delayed creation such that at least one node is not created until called by one or more of the plurality of applications;

is configured for dynamic creation, automatically by the computer without human user interaction, such that at least one node is created while the media timeline is rendered; and

is configured for dynamic loading such that metadata included in the at least one node created specifies a collection of nodes to be loaded when the media timeline is rendered.

78. (Original) A system as described in claim 77, wherein the media timeline is configured to reference an effect for application to an output of one or more of the plurality of media.

79. (Previously Presented) A system as described in claim 77, wherein:
the media timeline defines a presentation of a first media referenced by a first node with respect to a second media referenced by a second node; and
at least one node includes metadata that describes rendering of the at least one node.

80 and 81. (Canceled)

82. (Previously Presented) A system as described in claim 77, wherein at least one node is specified as read-only.

83. (Previously Presented) A system as described in claim 77, wherein at least one said node is configured for communication of events to another node such that a change may be made to the media timeline while the media timeline is rendered.

84. (Currently Amended) A computer comprising:

a processor; and

memory configured to maintain:

a plurality of media;

a plurality of applications, wherein each application is configured to request at least one of editing, encoding, and rendering of the plurality of media;

an infrastructure layer configured to:

provide an application programming interface (API) for interaction by the plurality of applications with the plurality of media; and

expose a media timeline, callable by the plurality of applications via the API, which includes a plurality of nodes that define a presentation of the plurality of media, wherein the media timeline specifies:

dynamic creation such that at least one of the plurality of nodes is created while the media timeline is being rendered automatically by the computer without human user interaction;

delayed creation of one or more nodes when the media timeline is rendered, wherein the delayed creation comprises creating the one or more nodes, automatically by the computer without human user interaction, when called by one or more applications; and

metadata that is utilized by the plurality of applications, wherein the metadata describes:

initiating rendering of the plurality of nodes is to be initiated;

properties and interrelationships of the plurality of nodes;

node types of the plurality of nodes; and

dynamic changes to the media timeline such that a group of nodes affected by a modification to an associated node are automatically updated in accordance with the modification as specified in the properties and interrelationships of the plurality of nodes;

at least one node that is configured for communication of events to another node such that a change may be made to the media timeline while the media timeline is being rendered; and

at least one node that is a parallel node that provides simultaneous rendering of at least two child nodes the child nodes including respective metadata and having respective pointers to respective media.

85. (Canceled)

86. (Previously Presented) A computer as described in claim 84, wherein the media timeline is configured for dynamic loading such that metadata included in at least one node specifies a collection of nodes to be loaded when the media timeline is rendered.

87. (Previously Presented) A computer as described in claim 84, wherein at least one node is configured to reference an effect to be applied to an output of media referenced by the node.

88. (Canceled)

89. (Previously Presented) A method as described in claim 33, wherein the plurality of node types further comprises:

a root node that specifies a starting point for rendering the media timeline, the root node including metadata that describes how rendering is to be initiated;

a leaf node that directly maps to media to be rendered and output, the leaf node including metadata that describes how to retrieve the media; and

a parallel node type that includes metadata specifying a plurality of leaf nodes that are rendered simultaneously.

90. (Previously Presented) A method as described in claim 41, wherein the plurality of node types further comprises:

a root node that specifies a starting point for rendering the media timeline, the root node including metadata that describes how rendering is to be initiated; and

a sequence node type that includes metadata that describes a rendering order of a plurality of leaf nodes to the sequence node.

91. (Previously Presented) A method as recited in claim 11, wherein a node specified as read-only disables functionality comprising one or more of:

skipping and/or deleting advertisements;

modifying the media timeline by other components while allowing dynamic changes to the original media timeline; or

adding new children to the original media timeline while allowing other components to set custom metadata on the original media timeline nodes.

92. (Previously Presented) A method as recited in claim 11, wherein the read-only wrapper contains cloned nodes that mirror a structure of the original media timeline.

93. (Previously Presented) A method as recited in claim 92, wherein the cloned nodes are configured to subscribe to events generated on the nodes of the original media timeline such that the structure of cloned nodes is kept updated as the original media timeline changes.

94. (Previously Presented) A method as described in claim 15, wherein the media timeline is configured for dynamic loading such that metadata included in at least one node specifies a collection of nodes to be loaded when the media timeline is rendered, the collection of nodes comprising a parallel node that includes metadata specifying a plurality of leaf nodes for simultaneous rendering.

95. (Previously Presented) A method as described in claim 49, wherein one or more nodes of the media timeline subscribes to events initiated by other nodes of the media timeline.

96. (Previously Presented) A method as described in claim 41, wherein the media timeline is configured for dynamic creation that occurs without user interaction.

Allowable Subject Matter

Claims 1-2, 4-5, 7-9, 11-18, 20-26, 28, 30-35, 37-41, 44-45, 47-52, 54-62, 64-68, 70-72, 74-79, 82-84, 86-87, 89-96 are allowed.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Independent claims 1, 15, 21, 33, 41, 49, 58, 66, 76-77, 84, each when considered as a whole, are allowable over the prior art of record.

The prior art of record fails to expressly disclose a media timeline comprising a plurality of nodes, corresponding media, and metadata, and configuring, automatically by the computer without human user interaction, the media timeline for dynamic creation such that at least one of the two or more nodes is created while the media timeline is being rendered; and specifying, automatically by the computer without human user interaction, delayed creation of one of the two or more nodes as a delayed node when the media timeline is rendered, wherein the delayed creation includes creating the delayed node when called by one or more applications, as recited in the claims.

Therefore, the prior art does not suggest or disclose the claims as a whole and are allowed over the prior art.

Claims 2, 4-5, 7-9, 14, 16-18, 20, 22-26, 28, 30-32, 34-35, 37-40, 44-45, 47-28, 50-52, 54-57, 59-62, 64-65, 67-68, 70-72, 74-75, 78-79, 82-83, 86-87, 89-96 are dependent upon Claims 1, 15, 21, 33, 41, 49, 58, 66, 76-77, 84 and are thus allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ENRIQUE W. ITURRALDE whose telephone number is (571)270-3627. The examiner can normally be reached on Monday-Friday 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571)272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. W. I./
Examiner, Art Unit 2179

/Weilun Lo/
Supervisory Patent Examiner, Art Unit 2179